

**Subatomic Particles for Atoms, Ions and Isotopes****/94**

Use your periodic table to complete this worksheet.

	Atom/Ion/Isotope name	Standard Atomic Notation	Atomic Mass	Atomic Number	Number of Protons	Number of Electrons	Charge	Number of Neutrons
1	Magnesium (Ion)	$^{24}_{12}\text{Mg}^{2+}$	24	12	12	10	+2	12
2	Flourine (Ion)	$^{19}_9\text{F}^{1-}$	19	9	9	10	-1	10
3	Phosphorous (Ion)	$^{31}_{15}\text{P}^{3-}$	31	15	15	18	-3	16
4	Calcium (Isotope)	$^{41}_{20}\text{Ca}$	41	20	20	20	0	21
5	Sulfur (Isotope)	$^{31}_{16}\text{S}$	31	16	16	16	0	15
6	Beryllium (Atom)	$^9_4\text{Be}$	9	4	4	4	0	5
7	Oxygen (Ion)	$^{16}_8\text{O}^{2-}$	16	8	8	10	-2	8
8	Potassium (Ion)	$^{39}_{19}\text{K}^{+1}$	39	19	19	18	+1	20
9	Argon (Atom)	$^{40}_{18}\text{Ar}$	40	18	18	18	0	22
10	Boron (Isotope)	$^{10}_5\text{B}$	10	5	5	5	0	5
11	Hydrogen (Isotope)	$^3_1\text{H}$	3	1	1	1	0	2
12	Aluminum (Ion)	$^{27}_{13}\text{Al}^{3+}$	27	13	13	10	+3	14
13	Silicon (Isotope)	$^{29}_{14}\text{Si}$	29	14	14	14	0	15
14	Carbon (Atom)	$^{12}_6\text{C}$	12	6	6	6	0	6
15	Copper (Isotope)	$^{63}_{29}\text{Cu}$	63	29	29	29	0	34

**\*NOTE:** when you are finished, you should have 3 atoms, 6 ions and 6 isotopes.